IN THE COLIED STATES PATENT AND TRADEM. K OFFICE

INFORMATION DISCLOSURE STATEMENT



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			Stephen H. Foulger et al.		ttorney Dock	_		
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Comm	issioner		olloidal Arrays					30
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Sir:								
	llowing .97, and		nformation Disclosure Statement for	the captioned pat	ent application	on, pursi	uant to 37 CFR	Sections
1. [x	Attach	ed here	to is:					
	a.[x]	A list	of materials for consideration per R	ule 98(a)(1): 4	page(s)			
	b.[x]	Rule 9	ble copy of each patent, publication, 98(c) and/or (d) and as indicated on titem(s)			98(1)(2),	unless not req	uired per
	c.[]	releva	ch <u>non-English language item listed</u> nce thereof as it is presently underst edgeable about the content of such i	ood by the individ		ed in Ru	le 56(c) most	the
			ch explanation is provided in the Sea with any enclosed translation into E		a correspondi	ng appli	cation enclose	d herewith
2.[x]	This In	formati	on Disclosure Statement is being file	ed [CHECK ONE	i]:			
	a.[x]	BEFO	IN THREE MONTHS of the applicate RE the mailing date of a first Office REFORE per Rule 97(b) NO filing for	Action on the me	erits, which e	ver even	of entry <u>OR</u> t occurs last,	
	b.[]		R the time periods of section 2.a about that otherwise closes prosecution, V					
		i.[]	Certification per Rule 97(e); OR					
		ii[]	Filing Fee per Rule 17(p)				\$180.	00
	c.[]		R a Final Action <u>OR</u> Notice of Allow the State of	wance, but BEFO	RE payment	of the is	sue fee, <u>WHEI</u>	REFORE
		i.	Certification per Rule 97(e); AND)				
		ii.	Filing fee per Rule 17(p)				\$180.	00
3.[]			tification; per Rule 97(e), the unders ECK ONE]:	signed certifying p	party make th	e follow	ving certification	on
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	b.[]	patent reason	o item of information contained in the office in a counterpart foreign appliable inquiry, was known to any inding of this statement.	cation and to the I	knowledge of	the und	ersigned after	making a

Page 1 of 2

being made by signer per signature below).

CERTIFYING PARTY (if different from bottom signature; omission here indicates that certification is

		Name: Signature: Address: Date:
4.[x]	specifi have b (defici or cred this sh	SIT ACCOUNT AUTHORIZATION: The Commissioner is hereby authorized to charge any fee cally authorized hereafter, or any fees in addition to the fee(s) filed, or asserted to be filed, or which should een filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 ency only) now or hereafter relative to this application and the resulting official document under Rule 20, lit any overpayment, to our Account No. shown in the heading hereof for which purpose a duplicate copy of eet is attached. This statement does not authorize charge of the issue fee in this case.
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		Signature: Date: November 36, 2001
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(Rev. 5/92)		Attorney Docket Number	Serial Number
Information Disc	losure Statement List	CXU-343	Not yet known
By A	pplicant	Applicant	
Under 37 CFR	Section 1.98(a) (1)	Stephen H. Foulge	r et al.
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	is not required and reason number is 1 (1) This item (2) A copy of Patent and U U Relied on (3) Both reason (4) No legible readily averages.	corresponding item is submitted herew l/or not submitted, for the following reas isted in "COPY NOTE" column]" is cumulative, per Rule 98(c) this item was previously cited by or sublemark Office in: SSN, filed	omitted to the U.S. omitted to the U.S. omitted to the U.S.
U.S. PATENT DOC	UMENTS		
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U.S. PATENT I	DOCUMENTS									
EXAMINER	PATENTEE NAME	PA	TEN	TNU	MBI	ER			ISSUE	COPY
INITALS		İ							DATE	NOTE
	Loisequx et al.	4	14	T 5	11	4	1.1	12	5/29/1984	
	Asher	4	6	2	17	6	8	9	12/9/1986	
	Asher	4	6	3	2	5	1	7	12/30/1986	
	Lawandy	4	8	0	3	6	8	8	2/7/1989	
	Alvarez	5	1	3	ī	7	3	6	7/21/1992	
	Nair et al.	5	1	3	3	9	9	2	7/28/1992	
	Haacke et al.	5	2	6	6	2	3	8	11/30/1993	
	Haacke et al.	5	3	6	8	7	8	1	11/29/1994	
	Kobayashi et al.	5	6	6	5	2	7	5	9/9/1997	
	Asher	5	7	3	7	1	0	2	4/7/1998	
	Asher et al.	6	0	0	1	2	5	1	12/14/1999	
	Asher et al.	6	0	1	4	2	4	6	1/11/2000	
	Darrow et al.	6	2	0	1	9	8	0	3/13/2001	

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EXAMINER	OTHER DOCUME		COPY
INITIALS	Specify author (if any), Title, Pertinent Pages	, Date & Place of Publication	NOTE
	FOULGER, Stephen H. et al., Robust polymer colloidal crystal photonic bandgap structures, pgs. 1300-1302, OPTIC LETTERS, Vol. 25, No. 17.	Optical Society of America, September 1, 2000.	
	XIA, Younan et al., Monodispersed Colloidal Spheres: Old Materials with New Applications, pgs. 693-713.	Advanced Materials, 12, No. 10, 2000.	
EXAMINER		DATE CONSIDERED	

Examiner:

initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

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		of Visible Light					Vol.	8, Nu	mber 8	•			
		se Silica-Poly(m Films, pgs. 2138			ylate;								
-	JIANG, P. e	t al., Single-Cry	stal C	Colle			Chen	n. Ma	ter. 199	9, 11	•	-	
	Multipayers 2132-2140.	of Controlled T	hickn	ess,	pgs.								
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		iffraction and C							SCOP	Y, Vo	ıl.		
	in Monodisp 297-304.	erse Polystyren	e Coll	loid	s, pgs	.	38, N	lo. 3,	1984.				1
	LlU, Lei et a	ıl., Crystalline C			Array	\dashv	J. An	n. Che	em. Soc	. 199	9,	+-	
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(Rev. 5/92)	Attorney Docket Number	Serial Number
Information Disclosure Statement List	CXU-343	Not yet known
By Applicant	Applicant	
Under 37 CFR Section 1.98(a) (1)	Stephen H. Foulge	er et al.
(Use several sheets if necessary)	Filing Date: 12/1/00	Group
	Confirmation No. Not known	Not known
		

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EXAMINER INITALS	PATENTEE NAME	PATEN	T NUI	MBE	R	ISSUE DATE	COPY NOTE

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EXAMINER	OTHER DOCUMEN	NTS	COPY
NITIALS	Specify author (if any), Title, Pertinent Pages,	Date & Place of Publication	NOTE
	RUNDQUIST, Paul A. et al., Dynamical	J. Chem. Phys., Vol.	
	Bragg diffraction from crystalline colloidal arrays, pgs. 4932-4941.	91,No. 8, 15.	
	REESE, Chad E. et al., Development of an Intelligent Polymerized Crystalline Colloidal Array Colorimetric Reagent, pgs. 5038-5042.	Analytical Chemistry, Vol. 73, No. 21, November 1, 2001.	
	HOLTZ, John H. et al., Intelligent Polymerized Crystalline Colloidal Arrays: Novel Chemical Sensor Materials, pgs. 780- 791.	Analystical Chemistry, Vol. 70, No. 4, February 15, 1998.	
	JETHMALANI, Jagdish M. et al., Optical Diffraction from Silica-Poly(methyl methacrylate) Composite Films, pgs. 2633-2640.	Langmuir 1997, 13.	
	JETHMALANI, Jagdish M. et al., Crystal Structures of Monidisperse Colloidal Silica in Poly(mythyl acrylate) Films, pgs. 3338- 3344.	Langmuir 1997, 13.	,
	PU, Zhengcai et al., Mechanical properties of a poly(methyl acrylate) nanocomposite containing regularly-arranged silica particles, pgs. 545-551.	Polymer Bulletin, Springer-Verlag 1996.	
EXAMINER		DATE CONSIDERED	

draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.